

Date: Wednesday, 1/30/2008 7:56:46 AM  
 User: Kim Johnston

## Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	OUTSIDE WASHER		
Job Number	37074		Part Number	D32333		
Estimate Number	11153		Drawing Number	D3233 REV B		
P.O. Number			Project Number	N/A		
This Issue	1/30/2008	S.O. No.	Drawing Revision	B		
Prsht Rev.	NC		Material			
First Issue	/ /	Type	MACHINED PARTS	Due Date	2/10/2008	Qty: 20 Um: Each
Previous Run	34176					
Written By						
Checked & Approved By	<u>JK/JLM</u>					
Comment	Est. B 05.03.31		Added Powder Coat KJ/JLM			

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M1020TR2000W500	1020-1025 Round Tube	
		Comment: Qty.: 0.0788 f(s)/Unit Total : 1.5750 f(s) 1020-1025 Round Tube Material: AISI 1020-1025 Seamless Tubing 2" x 0.500" wall (M1020TR2.000W.500) Identify for D3233-3 Batch: <u>M102210</u>	
2.0	HARDINGE	HARDINGE CNC LATHE SMALL	
		Comment: HARDINGE CNC LATHE SMALL Turn as per Folio FA518 and Dwg D3233 Deburr	
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE	
		Comment: INSPECT PARTS AS THEY COME OFF MACHINE	
4.0	QC8	SECOND CHECK	
		Comment: SECOND CHECK	
5.0	POWDER COATING	POWDER COATING	
		Comment: POWDER COATING Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA: D Date: 08/02/08  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 7:56:47 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OUTSIDE WASHER

Job Number: 37074

Part Number: D32333

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

AS 08/02/07 X 20

7.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST489

AS 08/02/07 X 20

8.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

AS 08/02/08

Job Completion



mic 2008/2/07 20

W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	37074
Description: Outside Washer	Part Number:	D3233-3
Inspection Dwg: D3233 Rev: B		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

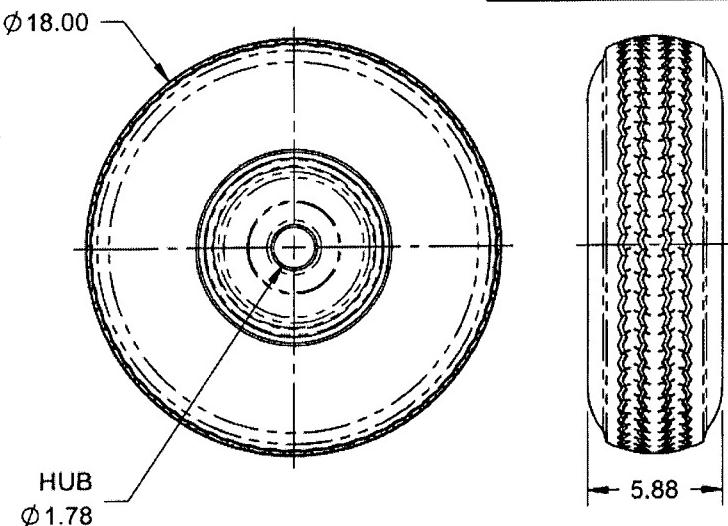
## X First Article Prototype

Measured by:	H.A / gnf	Audited by:	<i>[Signature]</i>	Prototype Approval:	N/A
Date:	08/01/30	Date:	08-01-30	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.26	New Issue	KJ/JLM	SAC

**DART**

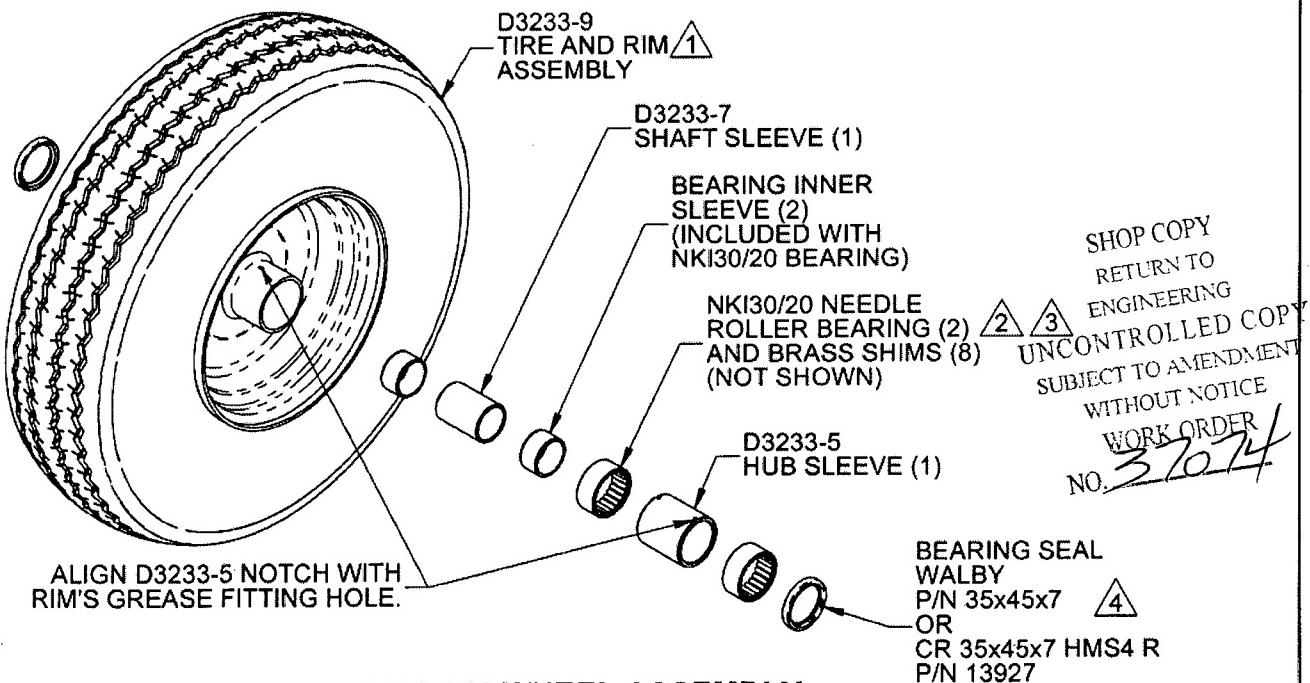
DESIGN 13	DRAWN BY 13	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED PF	APPROVED MAP	DRAWING NO. D3233	REV. B SHEET 1 OF 3
DATE 05.03.08		TITLE WHEEL ASSEMBLY	SCALE 1:1
A	05.02.18	NEW ISSUE	
B	05.03.08	ADDED BEARING SEALS	



**RELEASED**  
OS/OS/04

WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0	910 LBS (RANGE C)	90 PSI*

\* MANUFACTURER'S RECOMMENDATIONS  
ARE 75 PSI FOR HIGH SPEED USE.



### D3233-041 WHEEL ASSEMBLY

#### NOTES:

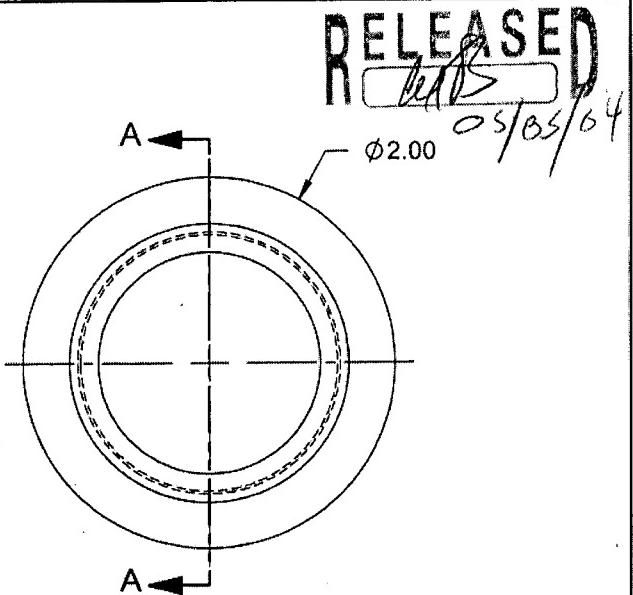
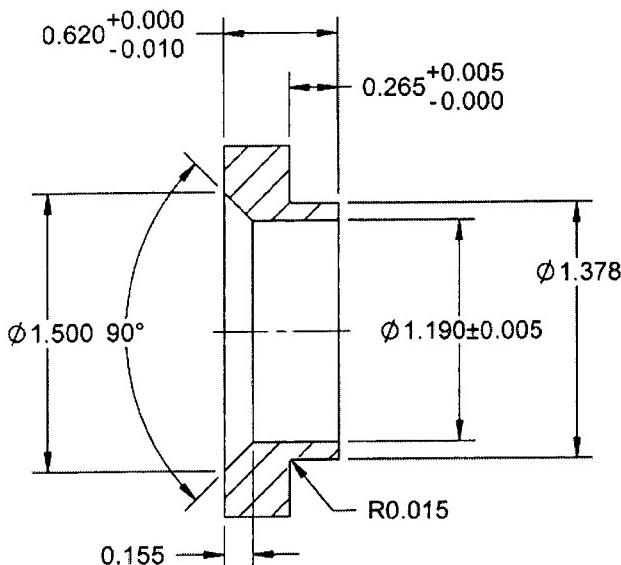
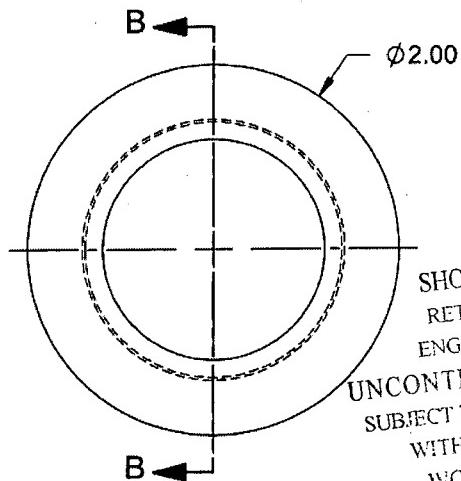
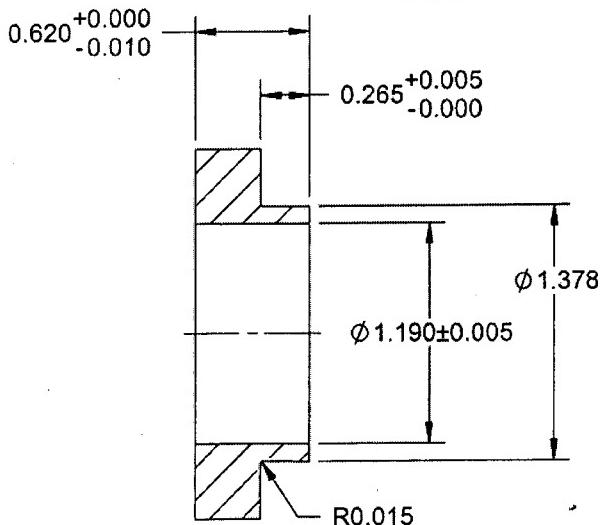
- 1) POSSIBLE SUPPLIER: McMaster-Carr, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH  
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233	REV. B SHEET 2 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY	SCALE 1:1	

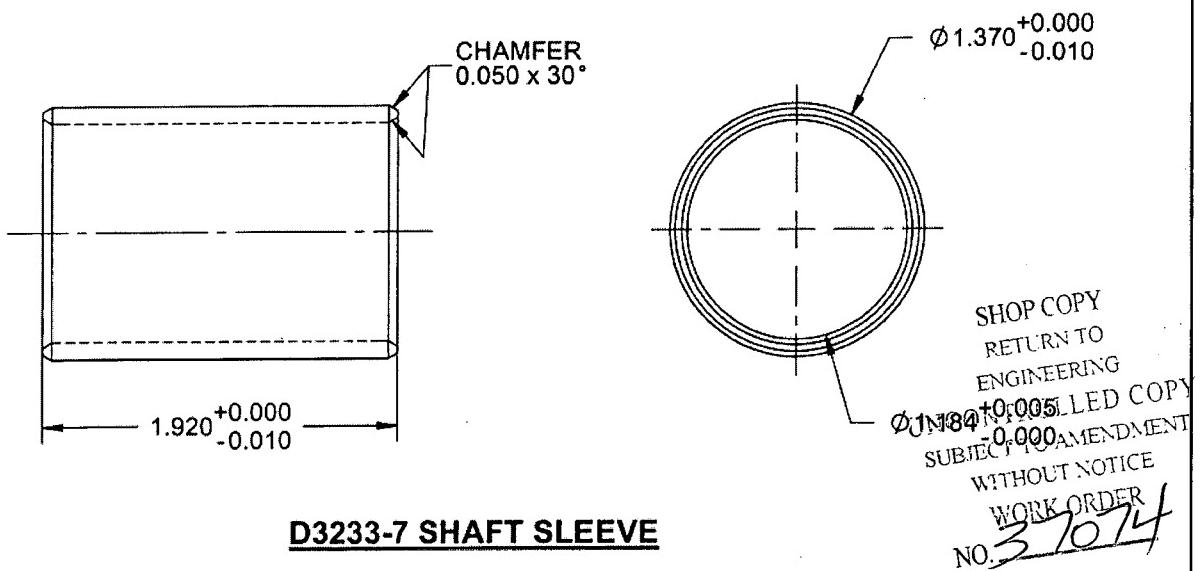
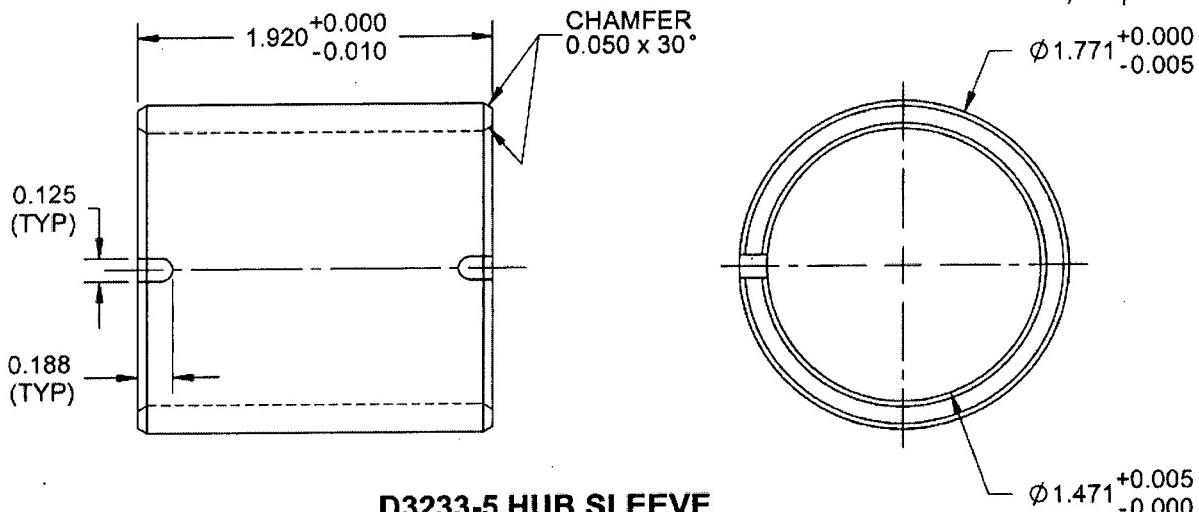
**SECTION A-A****D3233-1 INSIDE WASHER****SECTION B-B****D3233-3 OUTSIDE WASHER****NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00  
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS  
(REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *37074*

**DART**

DESIGN <i>JB</i>	DRAWN BY <i>JB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PF</i>	APPROVED <i>LWS</i>	DRAWING NO. D3233	REV. B SHEET 3 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY	SCALE 1:1	

**RELEASED**  
*WJS*  
05/05/04**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

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